INTERNATIONAL SEARCH REPORT

International application No. PCT/KR2004/001540

CLASSIFICATION OF SUBJECT MATTER

IPC7 C25B 9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 B01J, C01B, C02F, C25B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for inventions since 1975

Korean Utility modeds and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used) eKIPASS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| х | JP 11-33559 A (VMC CO., LTD. ET AL.) 9 FEBRUARY 1999 See abstract and figure 1, 5, 6 | 1-5 |
| A | US 6326862 B1 (KOGANEZAWA) 11 DECEMBER 2001 See figure 1, 2 and column 5 line 62 - column 6 line 46 | 1-5 |
| A | JP 2002-292370 A (SILVER SEIKO CO., LTD.) 8 OCTOBER 2002 See abstract and figure 1 | 1-5 |
| A | JP 11-302889 A (SUGA TEST INSTR CO., LTD.) 2 NOVEMBER 1999 See figure 1, 2 | 1-5 |
| A | JP 2-259090 A (SASAKURA ENG CO., LTD.) 19 OCTOBER 1990 See figure 1, 2 | 1-5 |
| | | |
| | | |

Further documents are listed in the continuation of Box C.

X | See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
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- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

22 SEPTEMBER 2004 (22.09.2004)

Date of mailing of the international search report

23 SEPTEMBER 2004 (23.09.2004)

Name and mailing address of the ISA/KR



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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/KR2004/001540

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|-----------------------------------|----------------------------|
| JP 11-33559 A | 09.02.1999. | None | |
| US 6326862 B1 | 11.12.2001. | JP 2001-181876 A EP 1111095 A1 | 03.07.2001. 27.06.2001. |
| JP 2002-292370 A | 08.10.2002. | None | |
| JP 11-302889 A | 02.11.1999. | None | • |
| JP 2-259090 A | 19.10.1990. | None | |

Form PCT/ISA/210 (patent family annex) (January 2004)